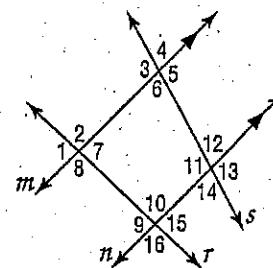


3-2 Practice

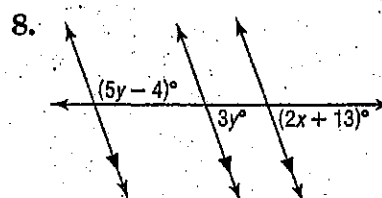
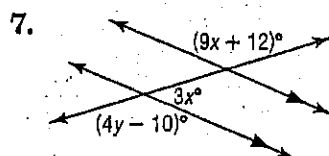
Angles and Parallel Lines

In the figure, $m\angle 2 = 92$ and $m\angle 12 = 74$. Find the measure of each angle.

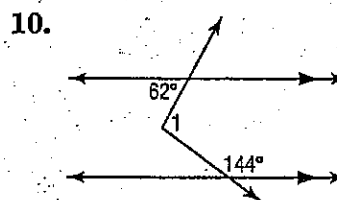
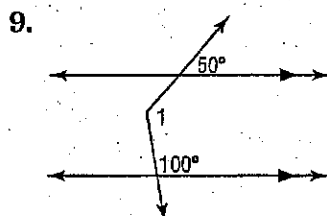
1. $\angle 10$
2. $\angle 8$
3. $\angle 9$
4. $\angle 5$
5. $\angle 11$
6. $\angle 13$



Find x and y in each figure.



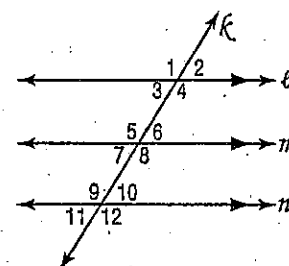
Find $m\angle 1$ in each figure.



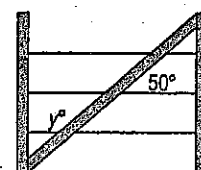
11. **PROOF** Write a paragraph proof of Theorem 3.3.

Given: $\ell \parallel m, m \parallel n$

Prove: $\angle 1 \cong \angle 12$



12. **FENCING** A diagonal brace strengthens the wire fence and prevents it from sagging. The brace makes a 50° angle with the wire as shown. Find y .



3-4 Skills Practice

Equations of Lines

Write an equation in slope-intercept form of the line having the given slope and y -intercept.

1. $m: -4$, y -intercept: 3

2. $m: 3$, y -intercept: -8

3. $m: \frac{3}{7}$, $(0, 1)$

4. $m: -\frac{2}{5}$, $(0, -6)$

Write equations in point-slope form and slope-intercept form of the line having the given slope and containing the given point.

5. $m: 2$, $(5, 2)$

6. $m: -3$, $(2, -4)$

7. $m: -\frac{1}{2}$, $(-2, 5)$

8. $m: \frac{1}{3}$, $(-3, -8)$

Write an equation in slope-intercept form for each line.

9. r

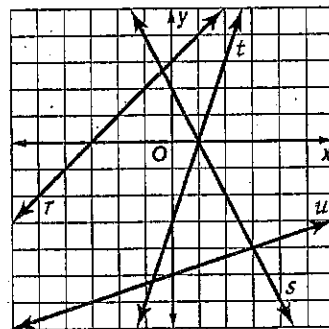
10. s

11. t

12. u

13. the line parallel to line r that contains $(1, -1)$

14. the line perpendicular to line s that contains $(0, 0)$



Write an equation in slope-intercept form for the line that satisfies the given conditions.

15. $m = 6$, y -intercept $= -2$

16. $m = -\frac{5}{3}$, y -intercept $= 0$

17. $m = -1$, contains $(0, -6)$

18. $m = 4$, contains $(2, 5)$

19. contains $(2, 0)$ and $(0, 10)$

20. x -intercept is -2 , y -intercept is -1